

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
24 June 2004 (24.06.2004)

PCT

(10) International Publication Number  
**WO 2004/054267 A3**

(51) International Patent Classification<sup>7</sup>: **H04N 7/24**  
(21) International Application Number:  
PCT/EP2003/050869

(22) International Filing Date:  
21 November 2003 (21.11.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
02293016.8 6 December 2002 (06.12.2002) EP

(71) Applicant (for all designated States except US): **THOMSON LICENSING S.A.** [FR/FR]; 46, quai A. Le Gallo, F-92100 Boulogne (FR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **DAMSTRA, Nicolaas, Johannes** [NL/NL]; Zwanebloem 11, NL-4828 MV Breda (NL). **EDGE, Robert, C.** [US/US]; 21645 SW Columbia Dr., Tualatin, OR 97062 (US).

(74) Agent: **BONNANS, Arnaud**; European Patent Operations, 46, quai A. Le Gallo, F-92648 Boulogne Cedex (FR).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

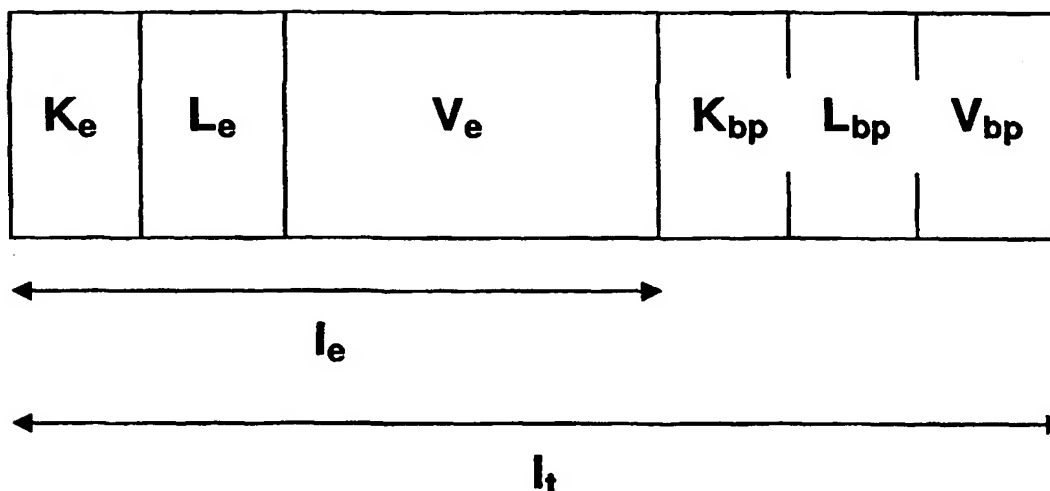
**Published:**

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:  
17 February 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHOD FOR RECORDING DATA, METHOD FOR RETRIEVING SETS OF DATA, DATA FILE, DATA STRUCTURE AND RECORDING MEDIUM



(57) Abstract: After recording a data container ( $K_e L_e V_e$ ), a back-pointer item ( $K_{bp} L_{bp} V_{bp}$ ) is recorded, comprising a specific key ( $K_{bp}$ ) and an indicator ( $V_{bp}$ ) of the length ( $l_e$ ) of the data container ( $K_e L_e V_e$ ). This back-pointer item ( $K_{bp} L_{bp} V_{bp}$ ) can be used to jump to the beginning of the data container ( $K_e L_e V_e$ ) when reading the file backwards. Other types of coding than KLV coding are also proposed. These types of coding can be used for instance to code the back-pointer item.

WO 2004/054267 A3

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/50869

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04N7/24

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	EP 0 794 667 A (SONY CORP) 10 September 1997 (1997-09-10) abstract column 16, line 22 - line 45 column 20, line 56 - column 21, line 6 figure 14	1-10
A	EP 1 148 728 A (THOMSON MULTIMEDIA SA) 24 October 2001 (2001-10-24) abstract page 5, line 42 - line 44 page 7, line 12 - line 19 page 8, line 6 - line 9	1-10

-/-



Further documents are listed in the continuation of box C.



Patent family members are listed in annex.

### \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

\*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

\*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

\*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

\*Z\* document member of the same patent family

Date of the actual completion of the international search

16 December 2004

Date of mailing of the international search report

23/12/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax (+31-70) 340-3016

Authorized officer

Fantini, F

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/50869

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>WILKINSON J: "THE SMPTE DATA CODING            PROTOCOL AND DICTIONARIES"            SMPTE JOURNAL, SMPTE INC. SCARSDALE, N.Y,            US,            vol. 109, no. 7, July 2000 (2000-07),            pages 579-586, XP000950346            ISSN: 0036-1682            the whole document</p>	1-10
A	<p>WO 02/21845 A (SONY UK LTD ;WILKINSON            JAMES HEDLEY (GB))            14 March 2002 (2002-03-14)            page 2, line 15 - line 21            page 3, line 7 - line 12            page 4, line 20 - page 8, line 11</p>	1-10

## INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/50869

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
EP 0794667	A	10-09-1997	JP 2785220 B2 13-08-1998
			JP 6325553 A 25-11-1994
			JP 3264290 B2 11-03-2002
			JP 6164522 A 10-06-1994
			EP 0794667 A2 10-09-1997
			AT 170354 T 15-09-1998
			AT 202252 T 15-06-2001
			AU 669563 B2 13-06-1996
			AU 4833393 A 12-04-1994
			DE 69320620 D1 01-10-1998
			DE 69320620 T2 14-01-1999
			DE 69330358 D1 19-07-2001
			DE 69330358 T2 28-02-2002
			EP 0622002 A1 02-11-1994
			WO 9407332 A1 31-03-1994
			JP 3551447 B2 04-08-2004
			JP 6267196 A 22-09-1994
			JP 3485111 B2 13-01-2004
			JP 2002204430 A 19-07-2002
			JP 2004080796 A 11-03-2004
			JP 3582529 B2 27-10-2004
			JP 2004072783 A 04-03-2004
			JP 3582530 B2 27-10-2004
			JP 2004007832 A 08-01-2004
			JP 2004304844 A 28-10-2004
			US 5455684 A 03-10-1995
			US 5504585 A 02-04-1996
			US 5568274 A 22-10-1996
			RU 2161377 C2 27-12-2000
EP 1148728	A	24-10-2001	EP 1148727 A1 24-10-2001
			EP 1148728 A1 24-10-2001
			AT 275800 T 15-09-2004
			AU 1384401 A 10-05-2001
			AU 7786800 A 10-05-2001
			CN 1378747 T 06-11-2002
			CN 1378748 T 06-11-2002
			DE 60013624 D1 14-10-2004
			WO 0126374 A1 12-04-2001
			WO 0126375 A1 12-04-2001
			EP 1222822 A2 17-07-2002
			EP 1224810 A1 24-07-2002
			JP 2003511810 T 25-03-2003
			JP 2003511918 T 25-03-2003
			MX PA02002798 A 14-10-2003
			BR 0101303 A 06-11-2001
			CN 1321045 A 07-11-2001
			EP 1148729 A1 24-10-2001
			HU 0101405 A2 29-07-2002
			JP 2002057985 A 22-02-2002
			TW 510129 B 11-11-2002
			US 2001040925 A1 15-11-2001
			ZA 200102267 A 19-09-2001
WO 0221845	A	14-03-2002	GB 2366926 A 20-03-2002
			EP 1316217 A1 04-06-2003
			WO 0221845 A1 14-03-2002
			JP 2004508777 T 18-03-2004

# INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP 03/50869

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0221845	A	US 2002164149 A1	07-11-2002